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10/657,716

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EXAMINER

DICKERSON, CHAD S

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/657,716 | Applicant(s) HOFFMANN, HOLGER | |
| | Examiner CHAD DICKERSON | Art Unit 2625 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/18/2009 has been entered.

Response to Arguments

2. Applicant's arguments filed 12/17/2008 have been fully considered but they are not persuasive. In the arguments filed 12/17/2008, the Applicant asserted that the claimed feature of "*setting up a transmission-controlling connection between the second fax machine and the second data gateway substantially simultaneously with the transmission-controlling connection between the first fax machine and the first data gateway*" is not disclosed by the combination of the background of the invention, Sakurai '373, Endo '038 or Johnston '585. The Examiner respectfully disagrees with this assertion.

In the reference of Johnston '585, the system discloses performing functions in figures 4 and 6 concurrently or partially concurrently¹. When looking at figure 6, the first and second facsimile devices establish a PSTN link with their respective gateways. If

¹ See Johnston '585 col. 10, ll. 3-10.

the PSTN link established with the sending facsimile occurs concurrently with the established link between the receiving facsimile and the respective gateway, the asserted claim feature mentioned above is performed. Therefore, with the above explanation, the Examiner believes the claim limitation is performed with the reference of Johnston.

When looking at the argument traversing the feature of transmitting identification information of a first fax machine to a second fax machine after the fax machines setup their transmission-controlling connection with their respective gateways, the Examiner still believes that this feature is taught by the applied references. Despite the repeated reiteration of this point in the response, the Examiner still does not see how the Endo reference does not perform this feature. The Examiner maintains this view because of a statement raised in the response on page 8 indicating "*A transmission controlling connection means again an exchange of T.30 signals*"². When looking at the statement of the Applicant, it is clear that the Endo reference performs the above feature of the transmission-controlling connection. In the Endo reference, column 8 clearly discloses that communication between the facsimile machines and the gateways occur within the T.30 communication procedure or standard³. Looking at figure 7, the steps (S1)-(S9) further illustrate the aspect of the transmission-controlling connection. The exchange of T.30 signals occur in steps (S1)-(S3) between the first fax machine and gateway and steps (S5) and (S6) between the second fax and gateway. With this illustration in figure

² Id. at page 8, lines 5 and 6.

³ See Endo '038 at column 8, lines 50-60.

7 combined with the recitation in column 8, it is clear that the transmission-controlling connection between the first and second facsimile devices and their respective gateways (as defined by the Applicant in the response) is performed by the reference of Endo⁴.

In regards to the transmission of identification information, the Sakurai reference clearly performs this feature by sending the TSI signal in figure 7 from the sending facsimile to the receiving facsimile device. In the facsimile art regarding Fax relay over Packet Networks, it is well known to send a DCS signal from the calling fax to a receiving facsimile. Within a DCS signal, a NSS signal (which is seen in Endo) along with the TSI signal (which is seen in Sakurai) can be sent to the receiving facsimile to identify the calling fax device and certain aspects of the calling device to the called fax device. Thus, with the combination of Endo '038 with the background of the invention, the reference of Sakurai '373 and Johnston '585, the contended claim limitations are performed.

Claim Objections

3. Claim 9 is objected to because of the following informalities:

- Claim 9 depends on a cancelled claim. It is suggested that the claim be dependent on either claim 1 or 3.

Appropriate correction is required.

⁴ Id. at column 14, line 38 – column 15, line 22.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 3-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Endo '038 (USP 6381038) and Sakurai '373 (US Pub No 2002/0001373) and Johnston '585 (USP 6480585).

Re claim 1: The admitted prior art discloses a method for setting up a fax connection between a calling fax machine controlled by a first communication facility and a called fax machine controlled by a second communication facility over a packet-oriented network connecting the communication facilities, comprising:

terminating sent data of a first fax machine at a first data gateway belonging to the first communication facility (i.e. when resources need to be released, the fax machine sends messages or data through the network unit to the data gateway. Step t0 is an example of the first fax machine using the network unit (NU1) to send request data to request the provisioning of resources of the first data gateway for data connection to the other fax machine in the system. This request is sent to the first data gateway, where it is terminated, which belongs to the first communication facility shown in figure 3; see figs. 2 and 3; paragraphs [0015]-[0024] in applicant's specification);

terminating sent data of a second fax machine at a second data gateway belonging to the second communication facility (i.e. the second fax machine sends data

to the second data gateway requesting provisioning of resources for the second data gateway for the data connection to be set up for the first fax machine. The second fax machine sends data to the second data gateway that is terminated at the second data gateway, which belongs to the second communication facility; see figs. 2 and 3; paragraphs [0025]-[0027] of applicant's specification);

setting up a payload data connection between the first and second data gateways (i.e. in the background of the invention, at set t5, the connection setup of a payload data connection takes place between the first data gateway (DG1) of the first fax protocol and the second data gateway (DG2) of the second fax protocol; see figs. 2 and 3; paragraphs [0028] and [0029] of applicant's specification);

setting up a transmission-controlling connection between the first fax machine and the first data gateway (i.e. the first data gateway acts as a fax machine communicating to the fax machine important information it receives. Once the first data gateway sets up the transmission connection with control messages, analogous to transmission-controlling connection, this sets up the first fax machine for transmission that will occur later on in the process. Illustrated in steps t14-16, the set up of the connection of the fax machine with the respective data gateway and the fax protocol takes place before the transmission of the image data occurs. Step t14, indicates the successful initialization of the sender side arrangements for initiating the data connection to the first data gateway, which is analogous to setting up the connection that controls the transmission of data between the first fax machine to the first data gateway. Also, with the connection setup occurring in t5 that setup a data connection

between the fax machines and their respective gateways, without this connection being established, the transmission of data would not occur. Therefore, this also can be considered as process that performs a transmission-controlled connection; see figs. 2 and 3; paragraphs [0041]-[0045]);

setting up a transmission-controlling connection between the second fax machine and the second data gateway (i.e. the second data gateway acts as a fax machine communicating to the fax machine important information it receives. Once the second data gateway sets up the transmission connection with control messages, analogous to transmission-controlling connection, this sets up the second fax machine for transmission that will occur later on in the process. Shown in figure 2B, steps t19-t22, illustrates the set up of the connection of the second fax machine with the respective data gateway. The second fax protocol establishes a connection with the second data gateway so that data can be transmitted to the second data gateway from the second fax protocol. Also, with the connection setup occurring in t5 that setup a data connection between the fax machines and their respective gateways, without this connection being established, the transmission of data would not occur. Therefore, this also can be considered as process that performs a transmission-controlled connection; see figs. 2 and 3; paragraphs [0045]-[0052]); and

transmitting identification information of the sending fax machine from the first data gateway to the second data gateway (i.e. in step t17, the system of the related art transmits identification information to the second data gateway from the first data

gateway of the sending or transmitting fax machine. This is clearly shown in figure 2B; see figs. 2 and 3; paragraphs [0045]-[0052]).

However, the admitted prior art fails to teach transmitting identification information of a sending fax machine from the first data gateway to the second data gateway after setting up the transmission-controlling connection between the second fax machine and the second gateway.

However, this is well known in the art as evidenced by Endo '038. Endo '038 discloses after setting up the transmission-controlling connection between the second fax machine and the second gateway (i.e. the reference of Endo is similar to the admitted prior art since both systems involve sending a facsimile message over an internet network. In Endo, the network (400) comprised of the internet is used in facsimile communications. However, Endo specifically discloses setting up a transmission controlling connection between a second facsimile device and the associated gateway. Shown in figure 7, the second facsimile device receives a call from the second gateway and in response to this call a line is established between the two devices. The Gateway then receives the CED signal, or the answering tone, and sends other signals to the first gateway. The signals sent before the actual image data is sent are considered as control signals; See figs. 6, 7 and 19; col. 2, ln 5-10, col. 11, ln 55 – col. 12, ln 35 and col. 14, ln 39 – col. 15, ln 16).

Therefore, in view of Endo '038, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of after setting up the transmission-controlling connection between the second fax machine and the second

gateway in order to have a line connection established through an exchange of various control signals after a call is made (as stated in Endo '038 col. 2, ln 5-10).

However, the admitted prior art in view of Endo '038 does not specifically teach transmitting identification information of a sending fax machine from the first data gateway to the second data gateway.

However, this is well known in the art as evidenced by Sakurai '373. Sakurai '373 discloses transmitting identification information of a sending fax machine from the first data gateway to the second data gateway (i.e. the system of Sakurai is similar to the above applied references since it involves sending a fax transmission over the internet (same field of endeavor). However, in the system, the different gateways establish communications with their respective facsimile devices. Each gateway establishes what state each facsimile is in. After, the communication is established with the gateways and facsimiles, the transmission signals are sent to connect the facsimiles and gateways. Once these are connect, in figures 7 or in the prior art figure 14, the TSI signal, considered as the identification signal, is sent to the second gateway from the first gateway; see figs. 7 and 14; paragraphs [0009]-[0019] and [0066]-[0075]).

Therefore, in view of Sakurai '373, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of transmitting identification information of a sending fax machine from the first data gateway to the second data gateway, incorporated in the device of the admitted prior art, as modified by the features of Endo '038, in order to connect the facsimile apparatus to the respective gateway for

the system to know the devices transmission or receipt state (as stated in Sakurai '373 paragraph [0047]).

However, the combination of the admitted prior art in view of Endo '038 and Sakurai '373 fails to specifically teach setting up a transmission-controlling connection between the second fax machine and the second data gateway substantially simultaneously with the transmission-controlling connection between the first fax machine and the first data gateway.

However, this is well known in the art as evidenced by Johnston '585. Johnston '585 discloses setting up a transmission-controlling connection between the second fax machine and the second data gateway substantially simultaneously with the transmission-controlling connection between the first fax machine and the first data gateway (i.e. Like the above applied references, the Johnston reference discloses facsimile signals is sent from a transmitting facsimile to a receiving facsimile device through respective gateways associated with each facsimile device (same field of endeavor). In the reference of Johnston '585, the system discloses performing functions in figures 4 and 6 concurrently or partially concurrently. When looking at figure 6, the first and second facsimile devices establish a PSTN link with their respective gateways. If the PSTN link established with the sending facsimile occurs concurrently with the established link between the receiving facsimile and the respective gateway, the asserted claim feature mentioned above is performed. Therefore, with the above explanation, the Examiner believes the claim limitation is performed with the reference of Johnston; see Johnston '585 col. 10, ll. 3-10.).

Therefore, in view of Johnston '585, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of setting up a transmission-controlling connection between the second fax machine and the second data gateway substantially simultaneously with the transmission-controlling connection between the first fax machine and the first data gateway, incorporated in the device of the admitted prior art, as modified by the features of Endo '038 and Sakurai '373, in order to perform facsimile functions concurrently (as stated in Johnston '585 col. 10, ll. 3-10).

Re claim 3: The teachings of admitted prior art in view of Endo '038, Sakurai '373 and Johnston '585 are disclosed above.

The admitted prior art discloses the method according to claim 1, wherein the identification information identifies a type of fax machine (i.e. as stated in paragraph [0045] of the background of the invention, the TSI can be details of the type of fax; see paragraph [0045] of the background of the invention).

Re claim 4: The teachings of admitted prior art in view of Endo '038, Sakurai '373 and Johnston '585 are disclosed above.

The admitted prior art discloses the method according to claim 1, wherein the identification information contains information about a directory number identifying the fax machine (i.e. as stated in paragraph [0045] of the background of the invention, the

TSI can comprise of a directory number identifying the first fax machine or any other machine; see paragraph [0045] of the background of the invention).

Re claim 5: The teachings of admitted prior art in view of Endo '038, Sakurai '373 and Johnston '585 are disclosed above.

The admitted prior art discloses the method according to claim 1, wherein at least one of the first and second data gateways employs a fax protocol unit for converting connection-controlling payload data (i.e. at step t7, the fax protocol is used in the first data gateway in order to receive a request for opening a useful data channel for the waiting remote copy data transmission. The first fax protocol translates or converts this incoming information and opens up a useful data channel. This is an example of converting the connection-controlling useful data since it opens up a useful data connection based on the control message sent to the fax protocol; see figs. 2 and 3; paragraphs [0030]-[0035]).

Re claim 6: The teachings of admitted prior art in view of Endo '038, Sakurai '373 and Johnston '585 are disclosed above.

The admitted prior art discloses the method according to claim 1, wherein both the first and second data gateways employ a fax protocol unit for converting connection-controlling payload data (i.e. at step t7, the fax protocol is used in the first data gateway in order to receive a request for opening a useful data channel for the waiting remote copy data transmission. The first fax protocol translates or converts this incoming

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information and opens up a useful data channel. This is an example of converting the connection-controlling useful data since it opens up a useful data connection based on the control message sent to the fax protocol. Also, in step t19, a request is sent from the second data gateway to the second fax protocol requesting for the fax protocol to open up a useful data channel or connection for the waiting remote copy data transmission. The second fax protocol converts the useful data that controls the setting up of a connection in the system; see figs. 2 and 3; paragraphs [0030]-[0052]).

Re claim 7: The teachings of admitted prior art in view of Endo '038, Sakurai '373 and Johnston '585 are disclosed above.

The admitted prior art discloses the method according to claim 6, wherein control messages are exchanged between the fax protocol units and the data gateways, and the control messages are received and sent by an intermediately connected application interface (i.e. as stated in the background of the invention in paragraph [0033], control messages are sent between the fax protocols and the data gateways, which implies that one has to be a transmitter and one a receiver in the messaging process. These messages are sent and received via an intermediately connected CAPI protocol unit, which is also considered application interface; see paragraph [0033]).

Re claim 8: The teachings of admitted prior art in view of Endo '038, Sakurai '373 and Johnston '585 are disclosed above.

The admitted prior art discloses the method according to claim 7, wherein the application interface is embodied according to a CAPI standard (i.e. the application interface used in sending and receiving the messages in the system uses the known interface CAPI, which is a software or communication interface that makes the communication protocols available for the useful data channel; see paragraph [0033]).

Re claim 9: The teachings of admitted prior art in view of Endo '038, Sakurai '373 and Johnston '585 are disclosed above.

The admitted prior art discloses the method according to claim 2, wherein the identification information identifies a type of fax machine (i.e. as stated in paragraph [0045] of the background of the invention, the TSI can be details of the type of fax; see paragraph [0045] of the background of the invention).

Re claim 10: The teachings of admitted prior art in view of Endo '038, Sakurai '373 and Johnston '585 are disclosed above.

The admitted prior art discloses the method according to claim 9, wherein the identification information contains information about a directory number identifying the fax machine (i.e. as stated in paragraph [0045] of the background of the invention, the TSI can comprise of a directory number identifying the first fax machine or any other machine; see paragraph [0045] of the background of the invention).

Re claim 11: The teachings of admitted prior art in view of Endo '038, Sakurai '373 and Johnston '585 are disclosed above.

The admitted prior art discloses the method according to claim 10, wherein the first and second data gateways employ a fax protocol unit for converting connection-controlling payload data (i.e. at step t7, the fax protocol is used in the first data gateway in order to receive a request for opening a useful data channel for the waiting remote copy data transmission. The first fax protocol translates or converts this incoming information and opens up a useful data channel. This is an example of converting the connection-controlling useful data since it opens up a useful data connection based on the control message sent to the fax protocol; see figs. 2 and 3; paragraphs [0030]-[0035]).

Re claim 12: The teachings of admitted prior art in view of Endo '038, Sakurai '373 and Johnston '585 are disclosed above.

The admitted prior art discloses the method according to claim 11, wherein both the first and second data gateways employ a fax protocol unit for converting connection-controlling payload data (i.e. at step t7, the fax protocol is used in the first data gateway in order to receive a request for opening a useful data channel for the waiting remote copy data transmission. The first fax protocol translates or converts this incoming information and opens up a useful data channel. This is an example of converting the connection-controlling useful data since it opens up a useful data connection based on the control message sent to the fax protocol. Also, in step t19, a request is sent from the second data gateway to the second fax protocol requesting for the fax protocol to

open up a useful data channel or connection for the waiting remote copy data transmission. The second fax protocol converts the useful data that controls the setting up of a connection in the system; see figs. 2 and 3; paragraphs [0030]-[0052]).

Re claim 13: The teachings of admitted prior art in view of Endo '038, Sakurai '373 and Johnston '585 are disclosed above.

The admitted prior art discloses the method according to claim 12, wherein control messages are exchanged between the fax protocol units and the data gateways, and the control messages are received and sent by an intermediately connected application interface (i.e. as stated in the background of the invention in paragraph [0033], control messages are sent between the fax protocols and the data gateways, which implies that one has to be a transmitter and one a receiver in the messaging process. These messages are sent and received via an intermediately connected CAPI protocol unit, which is also considered application interface; see paragraph [0033]).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. Endo (USP 6522429) discloses a facsimile communication system that exchanges control signals and establishes communication lines before identification information and image data is transmitted.

8. Tanimoto '088 (USP 7206088) discloses in figures 3 and 7 that facsimile connections with a fax device and its gateway associated with a fax relay can occur simultaneously with a receiving facsimile device and its associated gateway and relay server.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAD DICKERSON whose telephone number is (571)270-1351. The examiner can normally be reached on 9:30-6:00pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Haskins can be reached on (571) 272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. D./
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Examiner, Art Unit 2625

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/Edward L. Coles/

Supervisory Patent Examiner, Art Unit 2625